

AMENDED CLAIMS

**Received in the International Bureau on 03 October 2005
(10/03/2005) original claim 1 replaced by amended claim 1**

1. A flow-controlled wind motor rotor (1) comprising one or more blades (3), said blades rotating around a central vertical axis (4) in a main bearing (5), said blades being parallel to the vertical axis (4), said blades being connected via crossbars (6), said blades being disposed freely rotatably in bearings (7), said blades (3) comprising a symmetrical aerodynamic profile (8) over their entire cross-section, said blades being orientable to the direction of the wind (10), and said rotor comprising a wind vane (9) to capture the direction of the wind

characterized in that

said rotor comprises a primary control mechanism (11), which is controlled by said wind vane (9) and aligns said profiles (8) of said blade(s) (3) along the wind direction (10) at each point of their trajectory (13) around the central vertical axis (4), said blades being disposed on said crossbars (6),

said rotor comprises a secondary control mechanism (12), which aligns the longitudinal axes of said profiles (8) of said blade(s) (3) to the wind (10) at each point of their trajectory (13) around the central vertical axis (4) so as to produce an optimum aerodynamic force depending on the rotation angle of the crossbars (6) with respect to the wind vane (9) and the rotation velocity of the crossbars (6), and

said secondary control mechanism (12) is subordinate to the first control mechanism (11).
2. The wind rotor of claim 1, characterized in that the control mechanisms (11, 12) are mechanically, electromechanically, hydraulically or pneumatically controllable.